

CLAIMS.

1. An AGC circuit comprising a detection circuit that detects a high frequency reception signal and outputs a detection signal including a pulsating component, and controlling a gain of an amplification circuit amplifying the high frequency reception signal according to a detection output of the detection circuit, wherein:
 - 5 a high frequency property of an amplifier that is connected immediately after the detection circuit is deteriorated; or
 - 10 a unit for deteriorating the high frequency property is connected to the amplifier.
- 15 2. The AGC circuit according to claim 1, wherein the amplifier whose high frequency property is deteriorated is configured in such a way that a channel length and a channel width in each MOSFET that configures the amplifier are set large up to a degree that the high frequency property of the amplifier deteriorates.
- 20 3. The AGC circuit according to claim 1, wherein the unit for deteriorating the high frequency property is a capacitor with large capacity that is connected between an output terminal of the amplifier

and ground.

4. The AGC circuit according to claim 1, wherein:
the unit deteriorating the high frequency property
is a smoothing circuit comprising:

5 a capacitor;
a voltage comparison circuit for
comparing a terminal voltage with an input voltage of
the capacitor;
a charge circuit for charging the capacitor
10 at intervals in a case where the input voltage is
relatively higher than the terminal voltage; and
a discharge circuit for discharging a
discharge current at intervals from the capacitor in
a case where the terminal voltage is relatively lower
15 than the input voltage; and
the smoothing circuit is connected to an output
terminal of the amplifier.

5. The AGC circuit according to claim 1, wherein
20 the amplifier whose high frequency property is
deteriorated is configured to increase a wiring capacity
up to a degree that the high frequency property of the
amplifier deteriorates by arranging respective MOSFETs
that configure the amplifier in such a way that wirings
25 among the MOSFETs are crossed with each other.

6. The AGC circuit according to one of claims 1 to 5, wherein

5 deterioration of the high frequency property is deterioration by an amount equal to or greater than 3dB in a frequency of the pulsating component.